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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,520	05/15/2006	Frank Cunningham		6748

7590
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UNITED KINGDOM

EXAMINER

BERNSTEIN, DANIEL A

ART UNIT	PAPER NUMBER
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4166

MAIL DATE	DELIVERY MODE
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08/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/583,520

Applicant(s)

CUNNINGHAM, FRANK

Examiner

DANIEL A. BERNSTEIN

Art Unit

4166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Specification

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are

solved by the applicant's invention. This item may also be titled "Background Art."

- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if

an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

- (i) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

1. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site <http://www.uspto.gov> in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450

2. The spacing of the lines of the specification is such as to make reading difficult. New application papers with lines 1½ or double spaced on good quality paper are required.

3. Claim 4 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim does not refer back in the alternative. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-8 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claims are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claims must be in one sentence form only. Note the format of the claims in the patents cited.

Regarding claim 1, the phrase "other materials" renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "other materials"), thereby rendering the scope of the claims unascertainable. See MPEP § 2173.05(d).

Also, in reference to claim 1 the applicant claims a "magnifying optical effect built into it that would be magnified to various thickness". This claim is indefinite, because it is unclear what the applicant means by "magnified to various thickness". This claim might be reciting that the magnifier can be made of varying thicknesses or that light can be magnified to different sizes or coverage areas. For the purpose of examining this

claim it will be assumed that the applicant meant a magnifying means, such as a lens, in which light is focused in a concentrated manor on the solar panel.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2 and 6-8 rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,123,067 to Warrick.

Warrick teaches:

In reference to claim 1

A structured frame (Fig.1 shows a tower 16, azimuth platform assembly 18 and exoskeleton frames 20) with glass or other materials having a shape that provides a magnifying optical effect (collection devices 24 have a plurality of lens assemblies, which are typically made of glass, but still fulfill the requirement set forth in the claim as made of "other materials") built into it that would be magnified to various thickness to be set above solar panels in order to magnify the rays of the sun (Column 4 lines 25-27, "collecting sun rays").

In reference to claim 2

The glass or other materials (refer to rejection of claim 1) providing an optical effect (lenses are inherently capable of "providing an optical effect") would be also built into the solar panels (Fig. 1) themselves to further increase efficiency these solar panels

would have the capability to form part of the bottom frame with the frame itself having the capability to be joined or linked to these panels (see the panels connected to a frame in Fig. 1).

In reference to claim 6

The frame would have the capability to use a camera system linked to the frame in order to check for damage to the panels for cracks or breaks from a remote location (see rejection of claim 1). The frame of Warrick is inherently capable of mounting a camera for the intended use of checking for damage to panels.

In reference to claim 7

The framed optical glass (see rejection of claim 1) itself would also be self-cleaning glass which is a recent development in the glass industry this optical self-cleaning glass would be built into the solar panel itself. The glass on a solar collector is inherently capable of being self cleaning, because since solar panels are located outside rain could help to clean the outer surfaces.

In reference to claim 8

A device that would be used in many situations and many locations from an office block to a house or caravan roof. The solar collector of Warrick is inherently capable of being used from "many locations".

8. Claim 3 and 5 rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 4,354,484 to Malone et al (Malone).

Malone teaches:

In reference to claim 3

The frame and glass (top layer) can be split from the bottom layered solar panels giving it the capability to be added on its own to existing solar panels already on buildings and the frame would be adjusted manually or automatically from a remote location (Column 10, lines 43-45) in order to get the most enhanced effects of the sun from various times of the day directed at the solar panel/or panels (tracking system described in Column 8, lines 56-68).

In reference to claim 5

A device that would use Bluetooth or other similar technology in order to control the frame or the magnified glass from a remote location in order to get the maximum effects from the sun (see rejection of claim 3). It is improper to claim the use of "Bluetooth", because "Bluetooth" is a trademarked name of a type of remote control. The claim recites "or other similar technology" and therefore the rejection of claim 3 with a remote control anticipates the claim.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 4 under 35 U.S.C. 103(a) as being unpatentable over Warrick in view of Malone

In reference to claim 4

Warrick teaches a device as in claim 1-2 (see rejection of claim 1 and 2 and objection to claim 4 for multiple dependent claims) where the glass/perspex set on a frame could be adjusted.

Warrick does not teach that the frame could be adjusted from a remote location via a mobile phone a computer or other device automatically.

Malone teaches a frame that can be adjusted from a remote location via a mobile phone a computer or other device automatically (see rejection of claim 3).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the control of Malone with the solar collector of Warrick. Controlling a solar panel remotely is clearly known in the art and therefore is not a novel invention. Many of the new sun tracking systems have automatic tracking systems that do not require remote control, but even those systems are controlled "remotely" by a computer.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No.'s 6,688,303, 6,696,637, 4,297,000 and US Patent Application Publication No. 2002/0023638 are all considered relevant prior art and teach many aspects of the applicant's claimed invention.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL A. BERNSTEIN whose telephone number is (571)270-5803. The examiner can normally be reached on Monday-Friday 8:00 AM - 5:00 PM EDT.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Bomberg can be reached on 571-272-4922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DAB
August 15, 2008

/Fenn C Mathew/
Primary Examiner